CITY OF LODI

COUNCIL COMMUNICATION

AGENDA TITLE: Amend Traffic Resolution by Approving Speed Limits on Kettleman Lane between Highway 99 Northbound Ramps and East City Limit

MEETING DATE: August 7, 1991

PREPARED BY: Public Works Director

RECOMMENDED ACTION: That the City Council amend the traffic resolution by approving speed limits on Kettleman Lane Between the Highway 99 Northbound Ramps and the East City Limit.

BACKGROUND INFORMATION: Public Works staff has recently updated engineering and traffic studies for 7 streets. These studies are performed following State of California Department of Transportation (Caltrans) guidelines in accordance with California Vehicle Code Section 40802. Based on the Vehicle Code Section 40802, in order to use radar enforcement, it is necessary to conduct engineering and traffic studies every five years on "non-local" streets. "Non-local" streets are the collector and arterial streets as shown on the Federal Aid System Maps. The engineering and traffic studies include measurement of prevailing speeds by a radar survey, review of unexpected conditions to the driver and accident data. The speed limits for the *6* streets were previously adopted in August 1986.

There are six streets that have no changes to existing speed limits and do not need City Council approval (see Table 1). The existing speed limits on the majority of these streets were mainly based on the 85th percentile speeds observed in the field.

The street that does need City Council's approval is Kettleman Lane, east of the Highway 99 ramps.

The City has recently annexed additional property, thereby extending the Easterly City Limits by approximately 1,130 feet on Kettleman Lane. The existing speed limit on Kettleman Lane west of the Highway 99 ramps was established by Caltrans and is posted at 35 mph. From Beckman Road easterly, the existing speed limit is 45 mph as established by San Joaquin County without a formal study for radar enforcement. Staff recommends establishing a 40 mph from Beckman Road to the east city 'limits. This will provide a smooth transition between existing zones. The 85th percentile of the two radar speed studies support this recommendation.

APPROVED Thos. A. Peterson

THOMAS A PETERSON

Staff requests that Council approve the Kettleman Lane speed limit indicated in Table **1.** If Council changes the recommended limits, such changes will not be radar enforceable.

FUNDING: Funding to be provided **by** the street maintenance account.

Jack L. Ronsko
Public Works Director

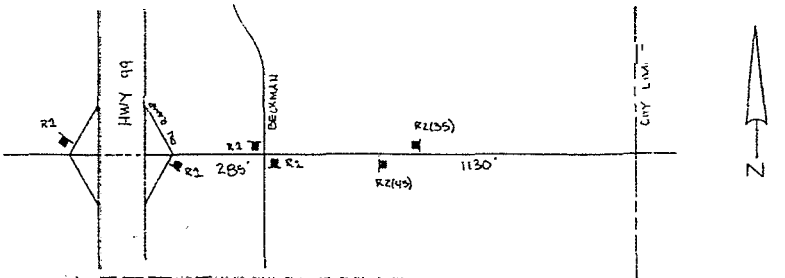
Prepared by Richard C. Prima Jr., **Assts** ant City Engineer, **and** Tom Cartwright, Traffic Engineering Assistant

JLR/TC/cl1
Attachment

cc: Police Chief
Street Superintendent
Assistant Civil Engineer-Traffic

ENGINEERING
AND TRAFFIC SURVEY

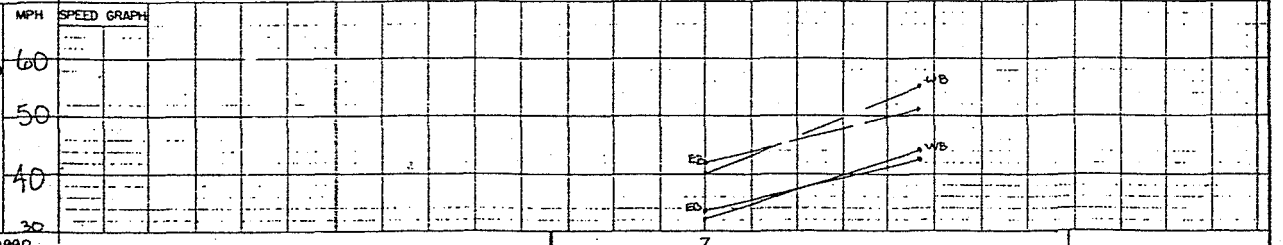
SEE NARRATIVE FOR
BACKGROUND INFORMATION



KETTLEMAN LN

SPEED TABLE					
ROADWAY WIDTH					25'
NO. OF LANES					2
MEDIAN (TYPE)					NONE
TRAFFIC SIGNAL DATA					
AVERAGE DAILY TRAFFIC					13,300 6500
OBS. SPEED – CRITICAL .85th %	WB				40
	EB				42
– PACE (%)	WB				32-42 (76)
	EB				33-43 (77)
– MEDIAN, 50th %	WB				36
	EB				37
EXISTING SPEED ZONE		(STATE)	35 MPH	55 MPH	45 MPH 45 MPH (COUNTY)
PROPOSED SPEED ZONE			35 MPH	40 MPH	45 MPH (COUNTY)

LEGEND:
- — SIGN LOCATION
- R1 — STOP SIGN
- R2( ) — SPEED LIMIT SIGN (MPH)
- R39 — YIELD SIGN
- C — INSTALLATION C (SCHOOL 25 MPH SIGNS, W65, R2(25), R72))
- — TRAFFIC SIGNAL
- ——— — CITY LIMIT
- – – – — CRITICAL SPEED
- ——— — LOWER LIMIT OF PACE



ACCIDENT PLOT	YR: 1990	7	
	YR: 1989	10	
ACCIDENT RATE – ACC./MILL. VEH.-MI.			5.8

Dr. S.B. TC
Ck PJF
Date 8/91

No.	Date	Revisions	Appr.

Approved By
Public Works Director — Date
RCE

CITY OF LODI
PUBLIC WORKS DEPARTMENT

KETTLEMAN LN

SPEED ZONE SURVEY

August 1991

SPEED ZONE REPORT - Kettleman Lane

° REFERENCE - Speed zone surveys are performed in the City of Lodi following State of California Department of Transportation (Caltrans) guidelines in accordance with Section 40802(b) of the California Vehicle Code. These guidelines are outlined in Chapter 8 of the Caltrans Traffic Manuzl.

° STUDY

Important factors to consider in determining the speed limit which is most appropriate to facilitate the orderly movement of traffic and that is reasonably safe are prevailing speeds, unexpected conditions to drivers, and accident records.

Prevailing Speeds (85th Percentile Speeds) - Reasonable speed limits conform to the actual behavior of the majority of motorists, and by measuring motorists: speeds, one will be able to select a speed limit that is both reasonable and effective. Speed limits should normally be established at the first five mile per hour increment below the 85th percentile speed. However, in matching existing conditions with the traffic safety needs of the community, engineering judgement may indicate the need for a further reduction of five miles per hour.

Two radar surveys were performed and the 85th percentile ranged from 40 to 42 mph.

Unexpected Conditions

When roadside development results in traffic conflicts and unusual conditions which are not readily apparent to drivers, speed limits below the 85th percentile are warranted. The following factors were considered: roadway design speed, safe stopping sight distance, superelevation, shoulder conditions, profile condition, intersection spacing and offsets, commercial driveway characteristics, and pedestrian traffic in the roadway without sidewalks.

There are no unexpected conditions used to further reduce the speed limit.

Accidents

Accident records of the two most recent years were considered in determining the speed zones. Accidents on segments of roadways are classified by their accident rate. Accident rates are determined by the number of accidents occurring within a segment of rcadway and the traffic volume within that segment. Accident rates are shown in accidents per million vehicle miles (ACC/MVM).

The accident rate is 8.8 ACC/MVM. The latest average city-wide accident rate is 4.6 ACC/MVM.

° CONCLUSION - The following posted speed limits are appropriate:

Kettleman Lane Segment	Existing	Recommended
Highway 99 Ramps - Beckman Road	35 mph	35 mph
Beckman Road - City Limits	45 mph	40 mph

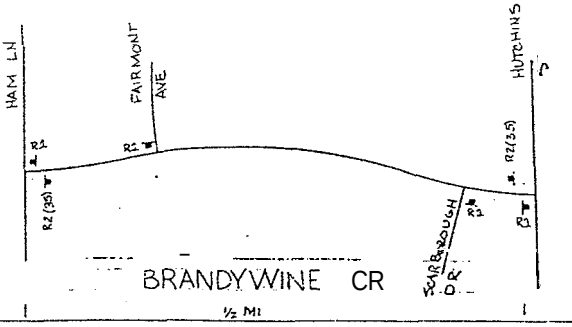
Kettleman Lane has a posted speed limit of 35 mph to the Highway 99 northbound ramps. Kettleman Lane west of Highway 99 northbound ramps is under the State of California (Caltrans) jurisdiction. Since the segment between Highway 99 ncrthbound ramps and Beckman Road is to short to perform a speed survey, the posted speed limit of 35 mph is appropriate. Based on the 85th percentile speeds observed in the field, a posted speed limit of 40 mph between Beckman Road and the east city limit is recommended. It is not recommended to further reduce the speed zones due to unexpected conditions and accident data. The 40 mph speed zone allows a transition area between the Caltran's 35 mph speed zone and the County's 45 rnph.

Jack L. Ronsko
Public Works Director

JLR/nl

ENGINEERING AND TRAFFIC SURVEY

SEE NARRATIVE FOR BACKGROUND INFORMATION

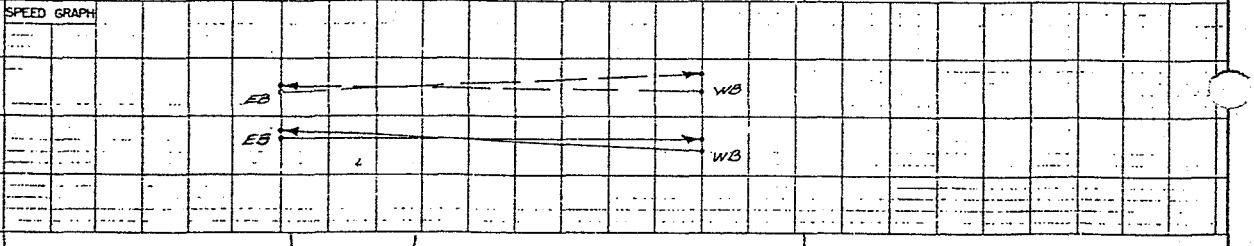


SPEED TABLE			
ROADWAY WIDTH		44'	
NO. OF LANES		2	
MEDIAN (TYPE)		NONE	
TRAFFIC SIGNAL DATA		N/A	
AVERAGE DAILY TRAFFIC		3010 (2005)	1000
OBS. SPEED - CRITICAL, 85th %	WB	35	34
	EB	34	37
- PACE (%)	WB	27-37 (82)	24-34 (82)
	EB	26-36 (87)	26-36 (72)
- MEDIAN, 50th %	WB	31	30
	EB	30	31
EXISTING SPEED ZONE		35 MPH	
PROPOSED SPEED ZONE		35MPH	

LEGEND:
- T - SIGN LOCATION
- R1 - STOP SIGN
- R2( ) - SPEED LIMIT SIGN (MPH)
- R39 - YIELD SIGN
- C - INSTALLATION C (SCHOOL 25 MPH SIGNS, W63, R2(25), R72)
- - TRAFFIC SIGNAL
- ——— CITY LIMIT
- - - - - CRITICAL SPEED
- ——— LOWER LIMIT OF PACE

MPH: 40, 30, 20

SPEED GRAPH



ACCIDENT PLOT	YR: 1990	1
	YR: 1989	0
ACCIDENT RATE - ACC/MIL. VEH-MI.		1.4

Dr. TC 5/8
Ck. RJF 5/8
Date 8/91

No.	Date	Revision	Appr.

Approved By: [signature] 8-7-91
PWE Director Date

CITY OF LODI
PUBLIC WORKS DEPARTMENT

BRANDYWINE DR

SPEED ZONE SURVEY

August 1991

SPEED ZONE REPORT - Brandywine Drive

° REFERENCE - Speed zone surveys are performed in the City of Lodi following State of California Department of Transportation (Caltrans) guidelines in accordance with Section 40802(b) of the California Vehicle Code. These guidelines are outlined in Chapter 8 of the Caltrans Traffic Manual.

° STUDY

Important factors to consider in determining the speed limit which is most appropriate to facilitate the orderly movement of traffic and that is reasonably safe are prevailing speeds, unexpected conditions to drivers, and accident records.

Prevailing Speeds (85th Percentile Speeds) - Reasonable speed limits conform to the actual behavior of the majority of motorists, and by measuring motorists' speeds, one will be able to select a speed limit that is both reasonable and effective. Speed limits should normally be established at the first five mile per hour increment below the 85th percentile speed. However, in matching existing conditions with the traffic safety needs of the community, engineering judgement may indicate the need for a further reduction of five miles per hour.

Four radar surveys were performed and the 85th percentile ranged from **34** to 37 mph.

Unexpected Conditions

When roadside development results in traffic conflicts and unusual conditions which are not readily apparent to drivers, speed limits below the 85th percentile are warranted. The following factors were considered: roadway design speed, safe stopping sight distance, superelevation, shoulder conditions, profile condition, intersection spacing and offsets, commercial driveway characteristics, and pedestrian traffic in the roadway without sidewalks.

There are no unexpected conditions used to further reduce the speed limit.

Accidents

Accident records of the two most recent gears were considered in determining the speed zones. Accidents on segments of roadways are classified by their accident rate. Accident rates are determined by the number of accidents occurring within a segment of roadway and the traffic volume within that segment. Accident rates are shown in accidents per million vehicle miles (ACC/MVM).

The accident rate is 1.4 ACC/MVM. The latest average city-wide accident rate is 4.6 ACC/MVM.

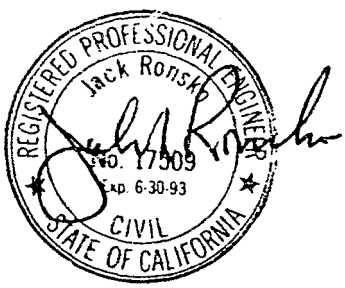
° CONCLUSION - The following posted speed limits are appropriate:

Brandywine Drive Segment	Posted Speed Limit
Ham Lane - Hutchins Street	35 mph

There are no changes from the existing posted speed limit. The recommended posted speed limits are based on the 85th percentile speeds observed in the field. It is not recmended to further reduce the speed zones due to unexpected conditions or accident records.

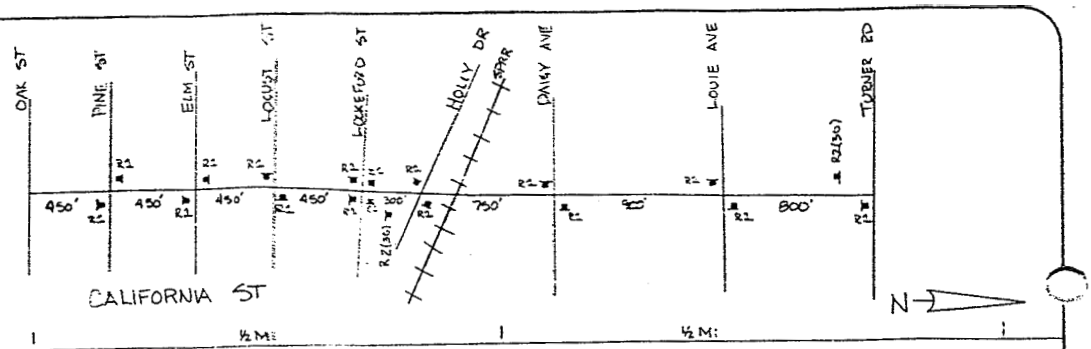
Jack L. Ronsko
Public Works Directo

JLR/nl



ENGINEERING AND TRAFFIC SURVEY

SEE NARRATIVE FOR BACKGROUND INFORMATION



SPEED TABLE						
ROADWAY WIDTH		39'	40'-45'	36'		
NO. OF LANES		2				
MEDIAN (TYPE)			NONE			
TRAFFIC SIGNAL DATA			NA			
AVERAGE DAILY TRAFFIC		1940	4840	2150	(2885)	1670
OBS. SPEED - CRITICAL, 85th %	55		31	35	31	
	NB		30	37	33	
- PACE (%)	55		22-32 (74)	26-36 (83)	26-36 (85)	
	NB		21-31 (80)	28-38 (78)	26-36 (87)	
- MEDIAN, 50th %	58		27	31	30	
	NB		26	31	30	
EXISTING SPEED ZONE		25 MPH		30 MPH		
PROPOSED SPEED ZONE		25 MPH		30 MPH		

LEGEND:
- "B" - SIGN LOCATION
- R1 - STOP SIGN
- R2( ) - SPEED LIMIT SIGN (MPH)
- R39 - YIELD SIGN
- C - INSTALLATION C (SCHOOL 25 MPH SIGNS, W65, R2(25), R72(1))
- - TRAFFIC SIGNAL
- ——— - CITY LIMIT
- — — — - CRITICAL SPEED
- ——— - LOWER LIMIT OF PACE

MPH SPEED GRAPH

40
30
20

58
98
ND
ND

FOR INFORMATION ONLY
THIS IS A LOCAL STREET PER V.C. SEC. 40802 (b). A STUDY IS NOT REQUIRED FOR RADAR ENFORCEMENT.

ACCIDENT PLOT	YR: 1990										
	YR: 1989										
ACCIDENT RATE - ACC./MILL. VEH.-MI.		0	0	5.3		2	1	1	3.0	1	

Dr. TC - 58
Ck. PUF
Date 6/91

No.	Date	Revision	Appr.

Approved: Public Works Director, Date 8-7-91

CITY OF LODI
PUBLIC WORKS DEPARTMENT

CALIFORNIA ST

SPEED ZONE SURVEY

August 1991

SPEED ZONE REPORT - California Street

° REFERENCE - Speed zone surveys are performed in the City of Lodi following State of California Gepartment of Transportation (Caltrans) guidelines in accordance with Section 40802(b) of the California Vehicle Code. These guidelines are outlined in Chapter 8 of the Caltrans Traffic Manual.

° STUDY

Important factors to consider in determining the speed limit which is most appropriate to facilitate the orderly movement of traffic and that is reasonably safe are prevailing speeds, unexpected conditions to drivers, and accident records.

Prevailing Speeds (85th Percentile Speeds) - Reasonable speed limits conform to the actual behavior of the majority of motorists, and by measuring motorists' speeds, one will be-able" to select a speed limit that is both reasonable and effective. Speed limits should normally be established at the first five mile per hour increment below the 85th percentile speed. However, in matching existing conditions with the traffic safety needs of the community, engineering judgement may indicate the need for a further reduction of five miles per hour.

Six radar surveys were performed and the 85th percentile ranged from **30** to **37** mph.

Unexpected Conditions

When roadside development results in traffic conflicts and unusual conditions which are not readily apparent to drivers, speed limits below the **85th** percentile are warranted. The following factors were considered: roadway design speed, safe stopping sight distance, superelevation, shoulder conditions, profile condition, intersection spacing and offsets, commercial driveway characteristics, and pedestrian traffic in the roadway without sidewalks.

There were no unexpected conditions used to further reduce the speed limit.

Accidents

Accident records of the two most recent years were considered in determining the speed zones. Accidents on segments of roadways are classified by their accident rate. Accident rates are determined by the number of accidents occurring within a segment of roadway and the traffic volume within that segment. Accident rates are shown in accidents per million vehicle miles (ACC/MVM).

The accident rate is 10.0 ACC/MVM between Lockeford Street and Turner Road. The latest average city-wide accident rate is **4.6** ACC/MVM.

° CONCLUSION - The following posted speed limit is appropriate:

California Street Segment	Posted Speed Limit
Lockeford Street-Turner Road	**30** mph

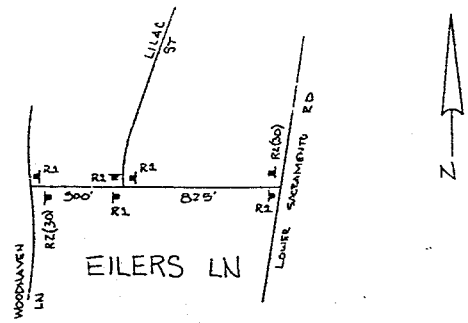
There are no changes from the existing posted speed limit. Based on the 85th percentile speeds observed in the field, the posted speed limit could be **30** or 35 **mph.** The accident rate is higher than average and therefore it is appropriate not to increase the speed limit. It **is** not recommended to further reduce the speed zone. due to unexpected conditions,

Jack L. Ronsko
Public Works Director

JLR/nl

ENGINEERING AND TRAFFIC SURVEY

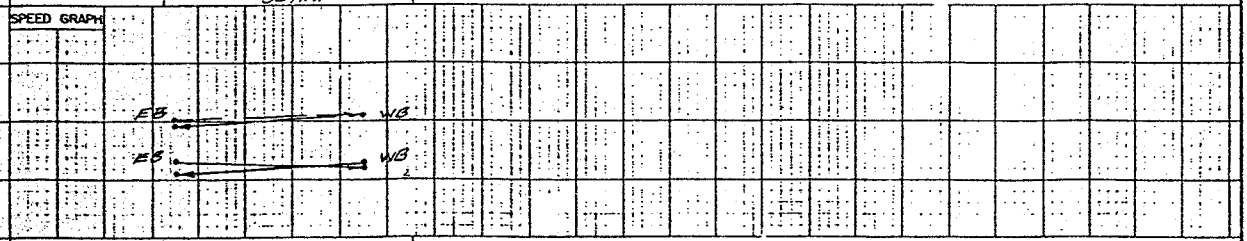
SEE NARRATIVE FOR BACKGROUND INFORMATION



SPEED TABLE			
ROADWAY WIDTH		44'	38'
NO. OF LANES		2	
MEDIAN (TYPE)		NONE	
TRAFFIC SIGNAL DATA		NA	
AVERAGE DAILY TRAFFIC		2200	810
OBS. SPEED - CRITICAL 85th %	WB	29	31
	EB	30	31
- PACE (%)	WB	21-31 (88)	23-33 (86)
	EB	23-33 (90)	22-32 (78)
- MEDIAN 50th %	WB	25	27
	EB	26	27
EXISTING SPEED ZONE		30 MPH	
PROPOSED SPEED ZONE		30 MPH	

LEGEND:
- T — SIGN LOCATION
- R1 — STOP SIGN
- R2( ) — SPEED LIMIT SIGN (MPH)
- R39 — YIELD SIGN
- C — INSTALLATION C (SCHOOL 25 MPH SIGNS, W65, R2(25), R72)
- — TRAFFIC SIGNAL
- ——— CITY LIMIT
- - - - - CRITICAL SPEED
- ——— LOWER LIMIT OF PACE

SPEED GRAPH



ACCIDENT PLOT	YR: 1990	0	
	YR: 1989	1	
ACCIDENT RATE - ACC/MILL. VEH.-MI.		2.5	

Dr. TC SB
Ck. PJF
Date 6/91

No.	Date	Revisions	Appr.

Approved By: [signature] Public Works Director — Date 8-7-91

CITY OF LODI
PUBLIC WORKS DEPARTMENT

EILERS LN

SPEED ZONE SURVEY

August 1991

SPEED ZONE REPORT - Eilers Lane

° REFERENCE - Speed zone surveys are performed in the City of Lodi following State of California Department of Transportation (Caltrans) guidelines in accordance with Section 40802(b) of the California Vehicle Code. These guidelines are outlined in Chapter 8 of the Caltrans Traffic Manual.

° STUDY

Important factors to consider in determining the speed limit which is most appropriate to facilitate the orderly movement of traffic and that is reasonably safe are prevailing speeds, unexpected conditions to drivers, and accident records.

Prevailing Speeds (85th Percentile Speeds) - Reasonable speed limits conform to the actual behavior of the majority of motorists, and by measuring motorists' speeds, one will be able to select a speed limit that is both reasonable and effective. Speed limits should normally be established at the first five mile per hour increment below the 85th percentile speed. However, in matching existing conditions with the traffic safety needs of the community, engineering judgement may indicate the need for a further reduction of five miles per hour.

Four radar surveys were performed and the 85th percentile ranged from 29 to **31** mph as shown below:

Unexpected Conditions

When roadside development results in traffic conflicts and unusual conditions which are not readily apparent to drivers, speed limits below the 85th percentile are warranted. The following factors were considered: roadway design speed, safe stopping sight distance, superelevation, shoulder conditions, profile condition, intersection spacing and offsets, commercial driveway characteristics, and pedestrian traffic in the roadway without sidewalks.

There are no unexpected conditions used to further reduce the speed limit.

Accidents

Accident records of the two most recent years were considered in determining the speed zones. Accidents **on** segments **of** roadways are classified by their accident rate. Accident rates are determined by the number of accidents occurring within **a** segment of roadway and the traffic **volume** within that segment. Accident rates are shown in accidents per million vehicle miles (ACC/MVM).

The accident rates is 2.5 ACC/MVM. The latest average city-wide accident rate **is 4.6** ACC/MVM.

SPEED ZONE REPORT - Eilers Lane

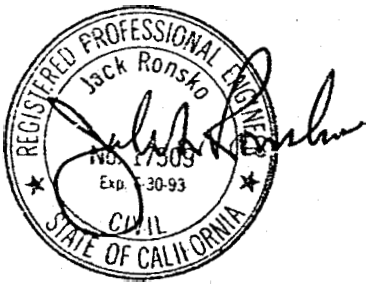
° CONCLUSION

Eilers Lane Segment	Posted Speed Limit
Woodhaven lane - Lower Sacramento Road	**30** mph

There are no changes from the existing posted speed limit. The recommended posted speed limits are based on **the** 85th percentile speds observed in the field. It is **not** recommended to further reduce the speed zones due to unexpected conditions or accident records.

Jack **L.** Ronsko
Public Works Director

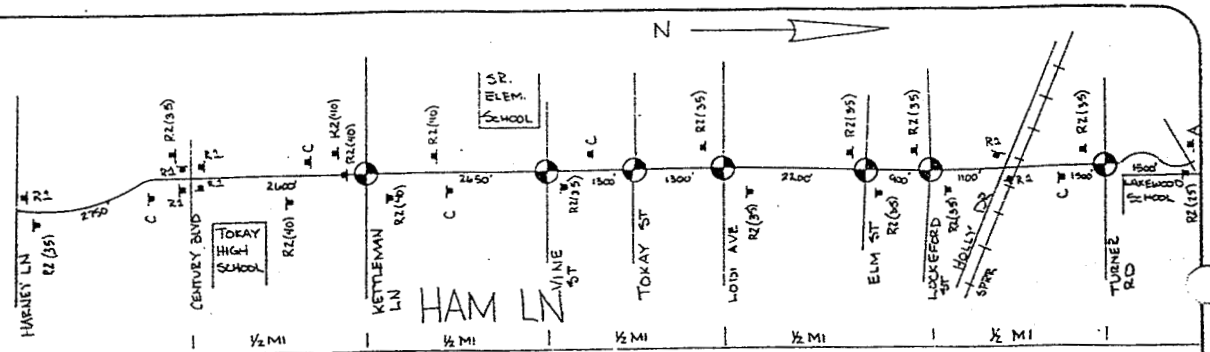
JLR/nl



SPEEDZ09/TXTW.02M

ENGINEERING AND TRAFFIC SURVEY

SEE NARRATIVE FOR BACKGROUND INFORMATION



SPEED TABLE												
ROADWAY WIDTH	64-84' VARIES		64'		55' VARIES	60'	56-62'					
NO. OF LANES	4				2 + LT LANE		2					
MEDIAN (TYPE)	RAISED CONCRETE				NONE							
TRAFFIC SIGNAL DATA			8φ ACTUATED		2φ ACTUATED	2φ ACT.	8φ ACT.		8φ ACT			2φ ACT
AVERAGE DAILY TRAFFIC	6140	(6470)	4800	(6700)	9,000	16,500	15,400	14710	15,220	12810	10,490	(8905) 7320
OBS. SPEED – CRITICAL, 85th % SB	36		43		42		38		38	36		38
NB	38		39		41		38		36	38		
– PACE (%) SB	32-42 (79)		32-42 (76)		32-42 (78)		31-41 (84)		30-40 (91)	31-41 (88)		
NB	31-41 (85)		32-42 (82)		33-43 (82)		30-40 (81)		29-39 (90)	30-40 (79)		
– MEDIAN, 50th % SB	36		37		33		34		34	34		
NB	34		36		37		34		33	34		
EXISTING SPEED ZONE	35 MPH		40 MPH		35 MPH							
PROPOSED SPEED ZONE	35 MPH		40 MPH									

LEGEND:
- "B" – SIGN LOCATION
- R1 – STOP SIGN
- R2( ) – SPEED LIMIT SIGN (MPH)
- R39 – YIELD SIGN
- C – INSTALLATION C [SCHOOL 25 MPH SIGNS, (W65, R2(25), R72)]
- – TRAFFIC SIGNAL
- ——— – CITY LIMIT
- – – – – CRITICAL SPEED
- ——— – LOWER LIMIT OF PACE

SPEED GRAPH: MPH 40 / 30 / 20; SB; SB

| | | | | | | | | | | | |

August 1991

SPEED ZONE REPORT - Ham Lane

- REFERENCE - Speed zone surveys are performed in the City of Lodi following State of California Department of Transportation (Caltrans) guidelines in accordance with Section 40802(b) of the California Vehicle Code. These guidelines are outlined in Chapter 8 of the Caltrans Traffic Manual.

- STUDY

Important factors to consider in determining the speed limit which is most appropriate to facilitate the orderly movement of traffic and that is reasonably safe are prevailing speeds, unexpected conditions to drivers, and accident records.

Prevailing Speeds (85th Percentile Speeds) - Reasonable speed limits conform to the actual behavior of the majority of motorists, and by measuring motorists' speeds, one will be-able to select a speed limit that is both reasonable and effective. Speed limits should normally be established at the first five mile per hour increment below the 85th percentile speed. However, in matching existing conditions with the traffic safety needs of the community, engineering judgement may indicate the need for a further reduction of five miles per hour.

Twelve radar surveys were performed and the 85th percentile ranged from 36 to 43 mph as shown below:

Street Segment	Northbound	Southbound
Harney Lane - Century Boulevard	38 mph	36 mph
Century Boulevard - Vine Street	39-41 mph	42-43 mph
Vine Street - Turner Road	36-38 mph	38 mph

Unexpected Conditions

When roadside development results in traffic conflicts and unusual conditions which are not readily apparent to drivers, speed limits below the 85th percentile are warranted. The following factors were considered: roadway design speed, safe stopping sight distance, superelevation, shoulder conditicns, profile condition, intersection spacing and offsets, commercial driveway characteristics, and pedestrian traffic in the roadway without sidewalks.

There are no unexpected conditions used to further reduce the speed limit.

Accidents

Accident records of the two most recent years were considered in determining the speed zones. Accidents OR segments of roadways are classified by their accident rate. Accident rates are determined by the number of accidents occurring within a segment of roadway and the traffic volume within that segment. Accident rates are shown in accidents per million vehicle miles (ACC/MVM).

The accident rates ranged from 1.9 to 6.3 ACC/MVM. The latest average city-wide accident rate is 4.6 ACC/MVM.

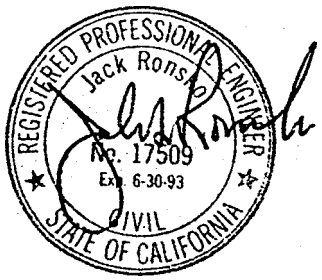
° CONCLUSION - The following posted speed limits are appropriate:

Ham Lane Segment	Posted Speed Limit
Harney Lane - Century Boulevard	35 mph
Century Boulevard - Vine Street	40 mph
Vine Street - Turner Road	35 mph

There are no changes from the existing posted speed limit. The recommended posted speed limits are based on the 85th percentile speeds observed in the field. It is not recommended to further reduce the speed zones due to unexpected conditions or accident records.

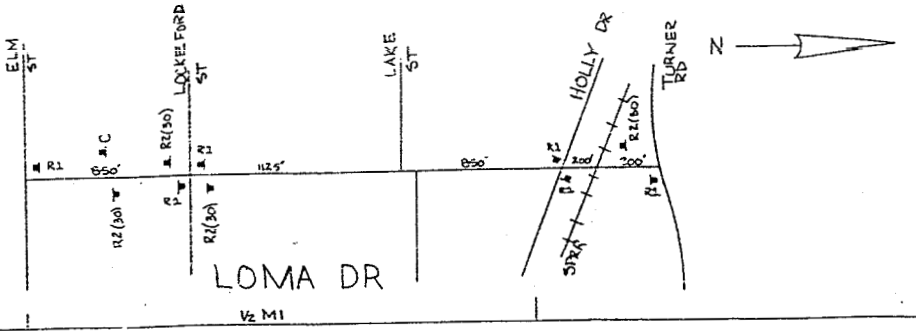
Jack L. Ronsko
Public Works Director

JLR/nl



ENGINEERING
AND TRAFFIC

SEE NARRATIVE FOR BACKGROUND INFORMATION

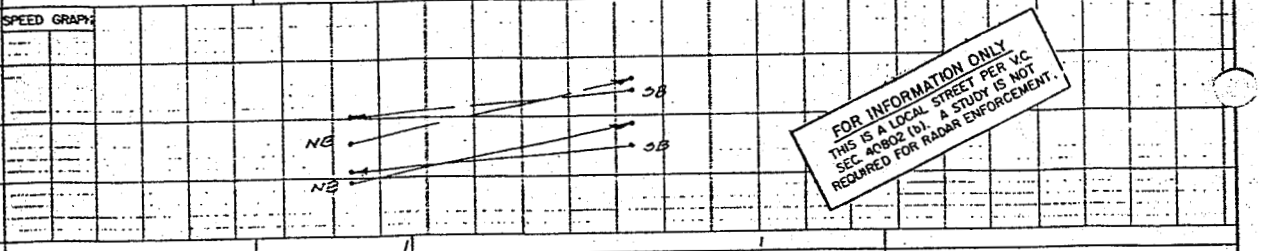


SPEED TABLE			
ROADWAY WIDTH	36'	39'	45' / 46'
NO. OF LANES		2	
MEDIAN (TYPE)		NONE	
TRAFFIC SIGNAL DATA		NA	
AVERAGE DAILY TRAFFIC			1,000
OBS. SPEED – CRITICAL, 85th % SB		30	34
NB		26	36
– PACE (%) SB		21-31 (68)	25-35 (80)
NB		19-29 (80)	28-38 (76)
– MEDIAN, 50th % SB		25	30
NB		23	31
EXISTING SPEED ZONE		30 MPH	
PROPOSED SPEED ZONE		30 MPH	

LEGEND:
- – SIGN LOCATION
- R1 – STOP SIGN
- R2( ) – SPEED LIMIT SIGN (MPH)
- R39 – YIELD SIGN
- C – INSTALLATION C (SCHOOL 25 MPH SIGNS, W65, R2(25), R72))
- – TRAFFIC SIGNAL
- ——— – CITY LIMIT
- – – – – CRITICAL SPEED
- ——— – LOWER LIMIT OF PACE

MPH: 40, 30, 20

SPEED GRAPH:



FOR INFORMATION ONLY
THIS IS A LOCAL STREET PER V.C. SEC. 40802 (b). A STUDY IS NOT REQUIRED FOR RADAR ENFORCEMENT.

ACCIDENT PLOT			
YR: 1990	1	2	1
YR: 1989			1
ACCIDENT RATE – ACC./MILL. VEH.-MI.	1.90		12.7

Dr. TC 5/8
Ck. PJF
Date 8/91

Approved: Public Works Director, 8-7-91

CITY OF LODI
PUBLIC WORKS DEPARTMENT

LOMA DR

SPEED ZONE SURVEY

August 1991

SPEED ZONE REPORT - Loma Drive

° REFERENCE - Speed zone surveys are performed in the City of Lodi following State of California Department of Transportation (Caltrans) guidelines in accordance with Section 40802(b) of the California Vehicle Code. These guidelines are outlined in Chapter 8 of the Caltrans Traffic Manual.

° STUDY

Important factors to consider in determining the speed limit which is most appropriate to facilitate the orderly movement of traffic and that is reasonably safe are prevailing speeds, unexpected conditions to drivers, and accident records.

Prevailing Speeds (85th Percentile Speeds) - Reasonable speed limits conform to the actual behavior of the majority of motorists, and by measuring motorists' speeds, one will be able to select a speed limit that is both reasonable and effective. Speed limits should normally be established at the first five mile per hour increment below the 85th percentile speed. However, in matching existing conditions with the traffic safety needs of the community, engineering judgement may indicate the need for a further reduction of five miles per hour.

Four radar surveys were performed between Elm Street and Turner Road and the 85th percentile ranged from 26 to 36 mph.

Unexpected Conditions

When roadside development results in traffic conflicts and unusual conditions which are not readily apparent to drivers, speed limits below the 85th percentile are warranted. The following factors were considered: roadway design speed, safe stopping sight distance, superelevation, shoulder conditions, profile condition, intersection spacing and offsets, commercial driveway characteristics, and pedestrian traffic in the roadway without sidewalks.

There are no unexpected conditions used to further reduce the speed limit.

Accidents

Accident records of the two most recent years were considered in determining the speed zones. Accidents on segments of roadways are classified by their accident rate. Accident rates are determined by the number of accidents occurring within a segment of roadway and the traffic volume within that segment. Accident rates are shown in accidents per million vehicle miles (ACC/MVM).

The accident rate ranged from 10.0 to 12.7 ACC/MVM. The latest average city-wide accident rate is 4.6 ACC/MVM. It is recommended to further reduce the 85th percentile speeds due to the higher than average accident rate.

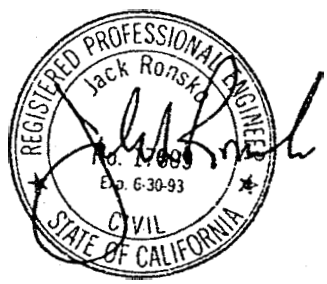
° CONCLUSION - The following posted speed limit is appropriate:

Loma Street Segment	Posted Speed Limit
Elm Street - Turner Raod	**30** mph

There are no changes from the existing posted **speed** limit. Based on the 85th percentile speeds observed in the field and the higher than average accident rate, a 30 mph posted speed limit is appropriate. It is not recommended to further reduce the speed limit due to unexpected conditions.

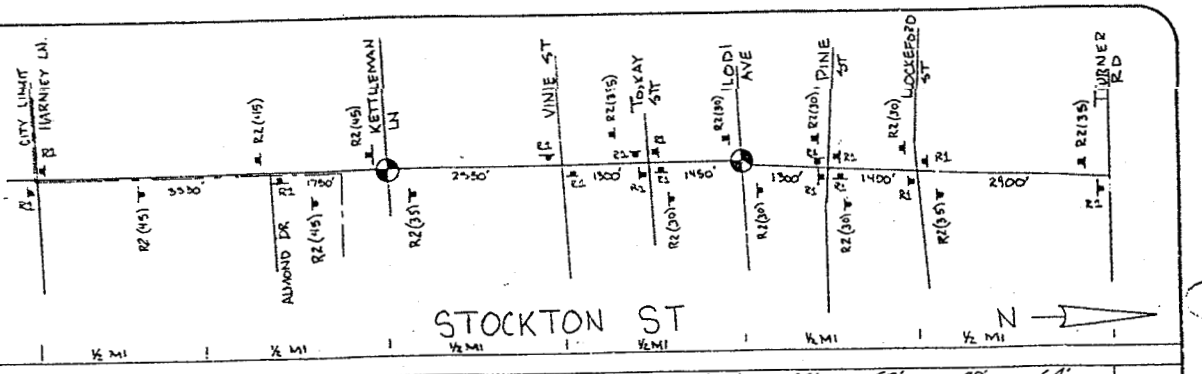
Jack L. Ronsko
Public Works Director

JLR/nl



ENGINEERING AND TRAFFIC SURVEY

SEE NARRATIVE FOR BACKGROUND INFORMATION

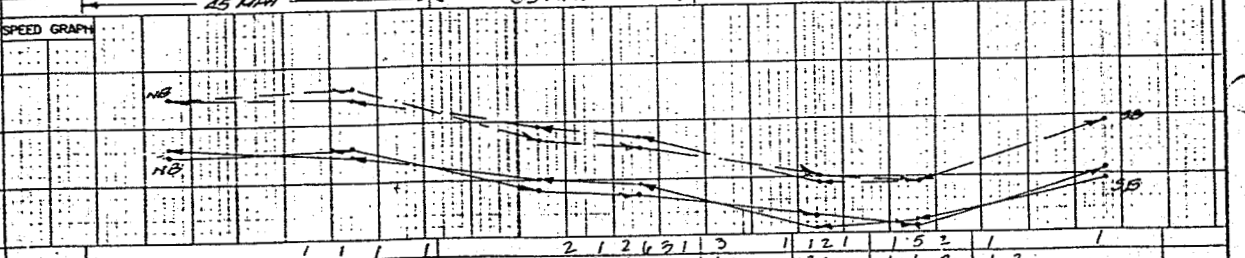


SPEED TABLE												
ROADWAY WIDTH		25'	44'	62'	60' VARIES		55'	52'	64'	57'	38'	64'
NO. OF LANES		2		2 + LT LN					2			
MEDIAN (TYPE)				NONE								
TRAFFIC SIGNAL DATA				3 Ø ACT				2 Ø ACT				
AVERAGE DAILY TRAFFIC		4850 (6450)	8050	8320 (6660)		5000 (5995)		6990 (6495)	6000		3150	
OBS. SPEED - CRITICAL 85th %	SB	45	44	39		37		29	29		39	SB
	NB	45	46	37		35		30	29		39	NB
- PACE (%)	SB	36-46 (75)	35-45 (75)	30-40 (79)		29-39 (26)		21-31 (84)	22-32 (92)		29-39 (75)	SB
	NB	35-45 (77)	36-46 (66)	28-38 (78)		27-37 (87)		2733 (91)	21-31 (86)		31-41 (79)	NB
- MEDIAN 50th %	SB	41	40	34		33		26	26		34	SB
	NB	40	40	32		32		26	25		34	NB
EXISTING SPEED ZONE		45 MPH		35 MPH				30 MPH		35 MPH		
PROPOSED SPEED ZONE		45 MPH		35 MPH				30 MPH		35 MPH		

LEGEND:

- "S" - SIGN LOCATION
- R1 - STOP SIGN
- R2( ) - SPEED LIMIT SIGN (MPH)
- R39 - YIELD SIGN
- C - INSTALLATION C (SCHOOL 25 MPH SIGNS, (W65, R2525), P721)
- - TRAFFIC SIGNAL
- ——— - CITY LIMIT
- – – – – - CRITICAL SPEED
- ——— - LOWER LIMIT OF PACE

SPEED GRAPH



| | | | | | | | | | | | |

August 1991

SPEED ZONE REPORT - Stockton Street

° REFERENCE - Speed zone surveys are performed in the City of Lodi following State of California Department of Transportation (Caltrans) guidelines in accordance with Section 40802(b) of the California Vehicle Code. These guidelines are outlined in Chapter 8 of the Caltrans Traffic Manual.

° STUDY

Important factors to consider in determining the speed limit which is most appropriate to facilitate the orderly movement of traffic and :hat is reasonably safe are prevai1ing speeds, unexpected conditions to drivers, and accident records.

Prevailing Speeds (85th Percentile Speeds) - Reasonable speed 1imits conform to the actual behavior of the majority of motorists, and by measuring motorists' speeds, one will be able to select a speed limit that is both reasonable and effective. Speed limits should normally be established at the first five mile per hour increment below the 85th percentile speed. However, in matching existing conditions with the traffic safety needs of the community, engineering judgement may indicate the need for a further reduction of five miles per hour.

Fourteen radar surveys were performed and the 85th percentile ranged from 29 to **46** mph as shown below:

Street Segment	Northbound	Southbound
Harney Lane - Kettleman Lane	**45-46** mph	44-45 mph
Kettleman Lane - Tokay Street	35-37 mph	37-39 mph
Tokay Street - tockeford Street	29-30 mph	29 mph
Lockeford Street - Turner Road	39 mph	39 mph

Unexpected Ccnditions

When roadside development **results** in traffic conflicts and unusual conditions which are not readily apparent to drivers, speed limits below the 85th percentile are warranted. The following factors were considered: roadway design speed, safe stopping sight distance, superelevation, shoulder conditions, profile condition, intersection spacing and offsets, commercial driveway characteristics, and pedestrian traffic in the roadway without sidewalks.

There are no unexpected conditions used to further reduce the speed limit.

Accidents

Accident records of the two most recent years were considered in determining the speed zones. Accidents on segments of roadways are classified by their accident rate. Accident rates are determined by the number of accidents occurring within a segment of roadway and the traffic volume within that segment. Accident rates are shown in accidents per million vehicle miles (ACC/MVM).

The accident rate ranged from 2.3 to 10.3 ACC/MVM. The latest average city-wide accident rate is 4.6 ACC/MVM.

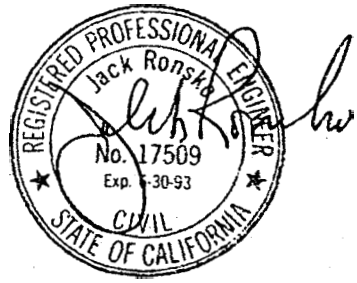
° CONCLUSION - The following posted speed limits are appropriate:

Stockton Street Segment	Posted Speed Limit
Harney Lane - Kettleman Lane	45 mph
Kettleman Lane - Tokay Street	35 mph
Tokay Street - Lockeford Street	30 mph
Lockeford Street - Turner Road	35 mph

There are no changes from the existing posted speed limit. The recommended posted speed limits are based on the 85th percentile speeds observed in the field. It is not recommended to further reduce the speed zones due to unexpected conditions or accident records.

Jack L. Ronsko
Public Works Director

JLR/nl



RESOLUTION NO. 91-146

RESOLUTION OF THE LODI CITY COUNCIL
AMENDING TRAFFIC RESOLUTION 87-163, AND THEREBY APPROVJMG SPEED LIMITS ON
KETTLEMAN LANE BETWEEN HIGHWAY 99 NORTHBOUND RAMPS AND EAST CITY LIMIT

RESOLVED, that the City Council of the City of Lodi does hereby amend Traffic Resolution No. 87-163, Section 7 - Speed Limits, to approve speed limits on Kettleman Lane between Highway 99 northbound ramps and East City Limits as shown on Table 1, attached hereto.

Dated: August 7, 1991

I hereby certify that Resolution No. 91-146 was passed and adopted by the Lodi City Council in an adjourned regular meeting held August 7, 1991 by the following vote:

Ayes: Council Members - Pennino, Pinkerton, Sieglock, Snider and Hinchman (Mayor)

Noes: Council Members - None

Absent: Council Members - None

Alice M. Reimche

City Clerk

Table 1

Street - Segment	Posted Speed Limit
Brandywine Drive	
Ham Lane–Hutchins Street	35 mph
California Street	
Oak Street–Lockeford Street	25 mph
Lockeford Street–Turner Road	30 mph
Eilers Lane	
Woodhaven Lane–Lower Sacramento Road	30 mph
Ham Lane	
Harney Lane–Centruy Boulevard	35 mph
Centruy Boulevard–Vine Street	40 mph
Vine Street–Turner Road	35 mph
Loma Drive	
Elm Street–Turner Road	30 mph
Stockton Street	
Harney Lane–Kettleman Lane	45 mph
Kettleman Lane–Tokay Street	35 mph
Tokay Street–Lockeford Street	30 mph
Lockeford Street–Turner Road	35 mph
RECOMMENDED	
Kettleman lane	
Beckman Road–East City Limits	40 mph
Highway 99 Northbound Ramp to Beckman Road	35 mph